Designation code: MWEN 13162-T4-WS-WL(P)-MU1-AW1-AFr50
Certification code:075-CPR-223.05-01

Assurance in insulation

Isover N

Mineral insulation from stone wool

TECHNICAL SPECIFICATION

Insulating slabs made of Isover mineral wool. The production is based on defibring method of the minerals composition melt and additional additives and ingredients. The mineral fibres produced are processed into the final slab shape on the production line. The entire fibre surface is hydrophobic. The slabs in the construction have to be protected suitably (separating PE foil).

APPLICATION

Isover N slabs are suitable for improving impact and airborne sound reduction in heavy floating floors under reinforced concrete slab (thicker slab can be also used in walls as an airborne sound insulation). Improvement in impact sound reduction in floors depends on use of the Isover N/PP insulating strips. The approved flatness of the underlay surface, when laying the flooring material, is 2 mm/2 m. The slabs are suitable for habitable rooms especially in family and apartment houses, imposed load ≤ 2kN/m².

PACKAGING, TRANSPORT, WAREHOUSING

Isover N insulation slabs are packed into the PE foil with package height up to 0.5 m. The slabs have to be transported in covered vehicles under conditions preventing their wetting or other degradation. They should be stored flat in sheltered space to maximum layer height of 2 m.

BENEFITS

- very good thermal insulation performance
- fire resistance
- excellent acoustic properties in terms of noise absorption
- low vapour resistance - good water vapour penetrability
- environmentally friendly and hygienic
- completely hydrophobic
- long life span
- resistant to wood-destroying pests, rodents, and insect
- easy workability - can be cut, drilled into, etc.

DIMENSIONS AND PACKAGING

Thickness	[mm]	20	30	40	50	100
Length × width	[mm]	1200 × 600				
Volume per package	[ks]	16	10	8	6	3
	[m²]	11.52	7.20	5.76	4.32	2.16
Quantity per palette	[m²]	172.80	115.20	80.64	69.12	34.65
Declared thermal resistance R_D	[m²·K·W⁻¹]	0.60	0.90	1.20	1.50	3.00

TECHNICAL PARAMETERS

Parameter	Unit	Methodology	Value	Designation code	
Geometric shape					
Length *l*	[%, mm]	EN 823	±2 %		
Width *b*	[%, mm]	EN 822	±2 %		
Thickness *d* (20–50 mm)	[%, mm]	EN 822	-5 % or -1 mm[1] and +5 % or 5 mm[1]	Class of thickness tolerances	T6
Thickness *d* (≥ 50 mm)	[%, mm]	EN 822	-1 % or -1 mm[1] and +3 mm	Class of thickness tolerances	T5
Deviation from squareness of the edge on length and width S_b	[mm·m⁻¹]	EN 824	5		
Deviation from flatness S_{max}	[mm]	EN 825	6		
Thermal technical properties					
Declared value of the thermal conductivity coefficient λ_D[2]	[W·m⁻¹·K⁻¹]	Declaration according to EN 13162+A1 Measurement according to EN 12667	0.033		
Specific heat capacity c_d	[J·kg⁻¹·K⁻¹]	ČSN 73 0540-3	800		
Mechanical properties					
Compressibility *c*	[mm]	Declaration according to EN 13162+A1 Measurement according to ČSN 12431	≤ 5	Declared level for compressibility Declared level of tensile strength perpendicular to faces	CP5
Hydrothermal properties					
Water vapour diffusion resistance factor μ	[-]	Declaration according to EN 13162+A1 Measurement according to EN 12086	1	Declared value for water vapour diffusion resistance factor	MU1
Fire safety properties					
Reaction to fire class	[-]	Declaration according to EN 13501-1+A1	A1		
Maximum temperature for use	[°C]		200		
Melting temperature t_t	[°C]	DIN 4102 part 17	≥ 1000		
Other properties					
Density	[kg·m⁻³]	EN 1602	100–110		

[1] Whichever gives the greatest numerical tolerance.
[2] Declared values were set under the following conditions (reference temperature 10 °C, humidity u_{dry} which is reached by drying) according EN ISO 10456.
[3] It is valid for typical use in construction with risk of condensation. In the case of construction without any risk of condensation it is possible to use the declared value of thermal conductivity.

RELATED DOCUMENTS

- Declaration of Performance CSW007-002

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